

What is Claimed Is:

1. A circuit breaker comprising:  
a case including an opening;  
separable contacts housed within said case;  
an operating mechanism for opening and closing said separable contacts, said operating mechanism including a pivot and at least one extension spring for moving said operating mechanism to close said separable contacts; and  
an operating handle for operating said operating mechanism, said operating handle including a first portion extending through the opening of said case and a second portion having at least one arm within said case, said at least one extension spring extending between said at least one arm and said pivot.
2. The circuit breaker of Claim 1 wherein said at least one extension spring is a pair of extension springs; and wherein said at least one arm is a pair of arms, with each one of said extension springs extending between a corresponding one of said arms and said pivot.
3. The circuit breaker of Claim 1 wherein said separable contacts have a closed position and an open position; wherein said operating mechanism further includes a pair of links having an unbroken state corresponding to the closed position of said separable contacts and a broken state; and wherein one of said links pivots about said pivot.
4. The circuit breaker of Claim 3 wherein said operating mechanism further includes a trip mechanism; wherein said separable contacts further have a tripped open position; and wherein the broken state of said links corresponds to the tripped open position.
5. The circuit breaker of Claim 3 wherein said pivot is a first pivot; wherein said case has a second pivot for said operating handle; and wherein said operating mechanism further includes a third link having a first end pivotally mounted to the second pivot of said case and a second end pivotally mounted to the first pivot of said operating mechanism.
6. The circuit breaker of Claim 3 wherein said operating handle has an open position corresponding to the open position of said separable contacts, and a closed position corresponding to the closed position of said separable contacts;

and wherein said at least one extension spring extends as said operating handle moves from the open position toward the closed position thereof, in order to load the links of said operating mechanism.

7. The circuit breaker of Claim 6 wherein said operating mechanism further includes a movable contact arm; and wherein said separable contacts include a fixed contact, which is fixed within said case, and a movable contact, which is carried by said movable contact arm.

8. The circuit breaker of Claim 6 wherein said operating mechanism further includes a movable contact arm; wherein a first one of said links pivots about said pivot; wherein a second one of said links is pivotally mounted to said movable contact arm; and wherein said separable contacts include a fixed contact, which is fixed within said case, and a movable contact, which is carried by said movable contact arm.

9. The circuit breaker of Claim 6 wherein said operating mechanism further includes a trip mechanism; wherein said separable contacts further have a tripped open position; and wherein the broken state of said links corresponds to the tripped open position.

10. The circuit breaker of Claim 9 wherein said operating mechanism further includes a lock maintaining the unbroken state of said links in the closed position of said separable contacts, said lock responding to said trip mechanism and releasing said links to the broken state thereof.

11. The circuit breaker of Claim 1 wherein said circuit breaker is a telecommunication circuit breaker.

12. A circuit breaker comprising:  
a case including an opening;  
separable contacts housed within said case, said separable contacts having a closed position and an open position;  
an operating mechanism for opening and closing said separable contacts, said operating mechanism including a pivot and a pair of extension springs for moving said operating mechanism to close said separable contacts; and  
an operating handle for operating said operating mechanism, said operating handle including a first portion extending through the opening of said

case and a second portion having a pair of arms within said case, with each one of said extension springs extending between a corresponding one of said arms and said pivot, said operating mechanism further including pair of links having an unbroken state corresponding to the closed position of said separable contacts and a broken state, with one of said links pivoting about said pivot.

13. The circuit breaker of Claim 12 wherein said operating mechanism further includes a trip mechanism; wherein said separable contacts further have a tripped open position; and wherein the broken state of said links corresponds to the tripped open position.

14. The circuit breaker of Claim 12 wherein said operating mechanism further includes a reset lever pivotally mounted to said case; wherein said operating handle further includes a tripped open position and an open position; and wherein said reset lever includes a first arm and a second arm, the arm of said operating handle engaging the first arm of said reset lever as said operating handle moves from the tripped open position to the open position thereof, said reset lever responsively pivoting and moving said second arm to engage and pivot said one of said links, in order to move said links from the broken state to the unbroken state thereof.

15. The circuit breaker of Claim 12 wherein said pivot is a first pivot; wherein said case has a second pivot for said operating handle; and wherein said operating mechanism further includes a third link having a first end pivotally mounted to the second pivot of said case and a second end pivotally mounted to the first pivot of said operating mechanism.

16. The circuit breaker of Claim 12 wherein said operating handle has an open position corresponding to the open position of said separable contacts, and a closed position corresponding to the closed position of said separable contacts; and wherein said extension springs extend as said operating handle moves from the open position toward the closed position thereof, in order to load the links of said operating mechanism.

17. The circuit breaker of Claim 16 wherein said operating mechanism further includes a movable contact arm; wherein said one of said links is a first link; wherein a second link of said links is pivotally mounted to said movable

contact arm; and wherein said separable contacts include a fixed contact, which is fixed within said case, and a movable contact, which is carried by said movable contact arm.

18. The circuit breaker of Claim 16 wherein said operating mechanism further includes a trip mechanism; wherein said separable contacts further have a tripped open position; and wherein the broken state of said links corresponds to the tripped open position.

19. The circuit breaker of Claim 18 wherein said operating mechanism further includes a lock maintaining the unbroken state of said links in the closed position of said separable contacts, said lock responding to said trip mechanism and releasing said links to the broken state thereof.

20. A circuit breaker comprising:  
a case including an opening;  
separable contacts housed within said case, said separable contacts having a closed position and an open position;  
an operating mechanism for opening and closing said separable contacts, said operating mechanism including a first pivot and a pair of links having an unbroken state corresponding to the closed position of said separable contacts and a broken state, with one of said links pivoting about said first pivot;  
an operating handle for operating said operating mechanism, said operating handle including a first portion extending through the opening of said case, an elongated second portion within said case, a second pivot between the first and second portions, and an end portion on said elongated second portion, said end portion being opposite said first portion; and  
means for moving said operating mechanism to close said separable contacts by providing a force between the end portion of said operating handle and the first pivot of said operating mechanism.

21. The circuit breaker of Claim 20 wherein said operating mechanism further includes a third link having a first end pivotally mounted to the second pivot of said operating handle and a second end pivotally mounted to the first pivot of said operating mechanism.

22. The circuit breaker of Claim 20 wherein the first portion of said operating handle is made of molded plastic; and wherein the elongated second portion of said operating handle is made of steel.

23. The circuit breaker of Claim 20 wherein the first portion of said operating handle has a first side, a second side, a generally cylindrical surface, an opening passing between the first and second sides, and a handle member disposed on the generally cylindrical surface; and wherein the elongated second portion of said operating handle includes an elongated first arm disposed from the first side of the first portion of said operating handle and an elongated second arm disposed from the second side of the first portion of said operating handle.

24. The circuit breaker of Claim 23 wherein the first portion of said operating handle is made of molded plastic; and wherein the elongated first and second arms of said operating handle are made of steel.